## **NIEM Overview**



## Modules Roadmap: You Are Here



#### **NIEM Overview**

**IEPD Concepts** 

How NIEM uses XML (pt. 1)

How NIEM uses XML (pt. 2)

**Business Skills** 

**Exchange Content Modeling** 

Mapping

Subsets

**Extension and Exchange Schemas** 

**Packaging and Distribution** 

Implementation Considerations



# **Objectives Roadmap**

This module supports the following course objective:

| Describe what NIEM is.   |
|--|
| Describe what an IEPD is.  |
| Comprehend artifacts included in an IEPD.  |
| Develop artifacts included in an IEPD.   |
| Package an IEPD.   |
| Understand advanced XML concepts, as required by NIEM.   |
| Recognize business skills required to successfully participate in an IEPD development project. |

# **Module Objectives**

- After completing this module, you should be able to:
  - Identify what NIEM is.
  - Recognize what NIEM is not.
  - Recognize what issues NIEM can address.
  - Identify the basic concept of an IEP / IEPD.

## **Discussion and Exercise**

# Preconceived notions!

# NIEM at 50,000 Feet



### What NIEM Is

- A National Standard that facilitates information sharing:
  - Across organizational and jurisdictional boundaries
  - At all levels of government
- A Data Model providing:
  - Agreed-upon terms, definitions, and formats for various business concepts
  - Agreed-upon rules for how those concepts fit together
  - Independence from how information is stored in individual agency systems
- A Structured Approach for:
  - Development tools, processes, and methodologies

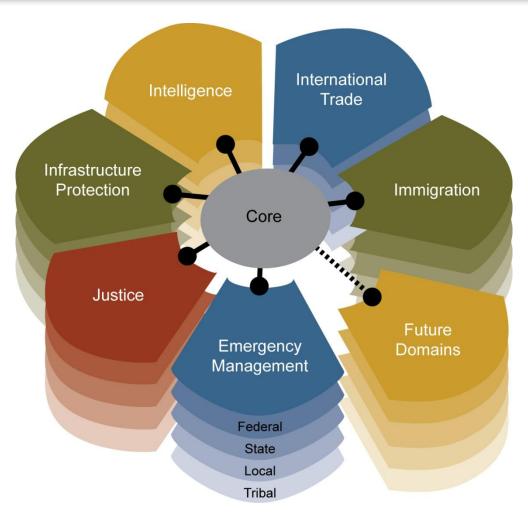


## What NIEM is Not

- A database schema
- Just a data dictionary
- Only applicable to the Federal government
  - Includes many other communities at all levels of government
- A programming language
- A replacement for interagency agreements
  - NIEM is the technical solution, the policy and business issues must also be worked out



# **Participating Communities**



## What Does NIEM Address? (1 of 2)

- Semantic interoperability
- Confusion on what framework to follow
- The question of "how"



## What Does NIEM Address? (2 of 2)

- Improves public safety and homeland security.
- Enhances the quality of justice and decision-making.
- Achieves greater efficiency, effectiveness, and return on investment (ROI) in operations and decision-making.
- Improves efficiency and effectiveness.
- Facilitates business transformation.
- Provides a valuable framework, infrastructure and governance that is scalable beyond the current domains for other cross-government information exchange challenges.



### What is an IEPD?

- Information Exchange Package Documentation
  - Provides the information exchange specification
  - Includes business artifacts (process, context)
    - Interagency agreements, ConOps, business case, etc.
  - Includes technical artifacts (structure, scope)
    - Schemas, UML, stylesheets, sample XML instances, etc.



## What is an IEP?

- Information Exchange Package
  - An XML instance conforming to the IEPD specification
  - Contains the transaction or message-level data passed between two information systems
  - The payload.....

### **NIEM Tools**

- Schema Subset Generation Tool (SSGT)
  - http://niem.gtri.gatech.edu/niemtools/ssgt/index.iepd
- NIEM Wayfarer
  - http://ncsconline.org/niemwayfarer/
- NIEM Dictionary
  - http://www.niemdictionary.com/
- Data Model Viewer
  - http://niem.gtri.gatech.edu/niemtools/ssgt/DataModelViewer.iepd
- "Work with IEPDs" Tool
  - http://niem.gtri.gatech.edu/niemtools/iepdt/index.iepd
- More tools:
  - http://niem.gtri.gatech.edu/niemtools/home.iepd
  - http://niem-o-rama.org/showcategory.php?topic=57



# **Module Summary**

- After completing this module, you should be able to:
  - Identify what NIEM is.
  - Recognize what NIEM is not.
  - Recognize what issues NIEM can address.
  - Identify the basic concept of an IEP / IEPD.

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